

K-11001

**Proposed Five Year Program
Activities and Cost Estimate (in \$ millions)**

		Estimated Cost (\$Million)					
		FY1998	FY 1999	FY 2000	FY 2001	FY 2002	TOTAL
ECOSYSTEM QUALITY							
Habitat Acquisition and Restoration							
<p>Purchase key properties and develop in partnerships for fish and wildlife habitat:</p> <p>FY 1998 Justification - These key properties provide a large connected block of habitat for several endangered species, waterfowl, and water for ecosystem management as required for Ecosystem Restoration Program Plan. Partnership money is in place.</p> <p>FY 1998 Accomplishment - Acquires up to 20,000 acres of endangered species and waterfowl habitat (used by 35% of all Pintail ducks in CA). A portion will be converted to seasonally managed wetlands and to tidal wetlands for fisheries and waterfowl.</p> <p>Consequence of Less than Full Funding - Currently willing sellers for key properties. Buying opportunity will likely be lost if not exercised by FY 1998. Lack of funding will require future purchase of smaller disconnected properties with less benefit.</p>		47	18	12	8	8	93
<p>Refuge and Sacramento and San Joaquin meander belt expansion:</p> <p>FY 1998 Justification - This key property provides a valuable in-Delta addition to the Stone Lakes National Wildlife Refuge and is part of the Ecosystem Restoration Program Plan.</p> <p>FY 1998 Accomplishment - Acquires up to 6,000 acres of valuable waterfowl habitat for expansion of existing refuge system.</p> <p>Consequence of Less than Full Funding - Currently a willing seller for key property. This buying opportunity will likely be lost if not exercised by FY 1998. Lack of funding will require future purchase of other adjacent properties.</p>		8	10	11			29

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	Develop or purchase wetlands in the Delta: FY 1998 Justification -This key property provides valuable in-Delta wetlands required as part of the Ecosystem Restoration Program Plan. FY 1998 Accomplishment - Acquires up to 1,000 acres of valuable wetland habitat to be managed as a wetlands bank. Consequence of Less than Full Funding - Currently a willing seller for key property. This buying opportunity will likely be lost if not exercised by FY 1998. Lack of funding will require future purchase of other adjacent properties.	7	12	10	8	8	45
	Delta and tributary levee modifications for the improvement of the environment (relating to habitat restoration and protection associated with Project and non-Project levees): FY 1998 Justification - Would restore shallow riparian and shallow water in-Delta habitat along levees that is required as part of the Ecosystem Restoration Program Plan. FY 1998 Accomplishment - Would restore 10 to 30 miles of valuable levee associated habitat. Consequence of Less than Full Funding - The lack of habitat has a direct effect on the populations of 3 endangered species, 1 species of special concern, and recreational and commercial fisheries values. Delays could further jeopardize these.	20	30	30	15	15	110
	Sacramento River habitat improvement: FY 1998 Justification -Would restore habitat on bare Sacramento River levees as part of the Ecosystem Restoration Program Plan. FY 1998 Accomplishment - Would restore 2 to5 miles of valuable river levee associated habitat when levee repairs are required. Consequence of Less than Full Funding - The lack of habitat has a direct effect on the populations of 3 endangered species, 1 species of special concern, and recreational and commercial fisheries values. Delays could further jeopardize these.	11	12	10			33
	Habitat development on Western Delta islands and aquatic habitat development on bare waterside levee banks	2	2	1			5
	Subsidence control analyses and levee seismic evaluations to protect habitat	3	5	5	4	3	20

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	Restore aquatic habitats with beneficial reuse of dredge materials	3	6	6	6	6	27
	Watershed management for habitat enhancement	2	6	4	10	8	30
	Reconnaissance, feasibility, predesign, and environmental documentation for habitat restoration and new projects	3	4	6	5	3	21
	Fish Screening and Passage						
	Fish ladders to improve fish passage at key locations: FY 1998 Justification - Would allow key fish species to pass existing barriers and reach new habitat as required as part of the Ecosystem Restoration Program Plan. FY 1998 Accomplishment - Provides for construction of 2 fish ladders that would reduce fish migration delays and open previously inaccessible stream channel. Consequence of Less than Full Funding - The lack of habitat has a direct effect on the populations of 3 endangered species, 1 species of special concern, and recreational and commercial fisheries values.	6	5	6	2	2	21
	Improve fish screening throughout the Bay-Delta system to reduce fish losses: FY 1998 Justification - Unscreened diversions are a source of direct mortality to 3 endangered species, 1 species of special concern, and recreational and commercial fishery values. FY 1998 Accomplishment - Would screen 5 to 10 diversions (approximately the highest priority 5 percent unscreened or inadequately screened diversions in the Delta and tributaries). Consequence of Less than Full Funding - A delay in screening would reduce the benefits of other habitat improvements. Continued endangered species losses could lead to reduce timing of water exports to agricultural and 2/3 of urban water users.	10	12	23	26	24	95
	Reconnaissance, feasibility, predesign, and environmental documentation for fish passage/screening projects	1	2	2	2	2	9
	Program to isolate gravel pits along rivers that affect fish migration and to improve fish passage	2	4	2	2	2	12

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	State cost-share of fish and wildlife restoration measures required by Section 3406 of CVPIA:	37	9	11	15	21	93
	Improve control of introduced species	2	2	2	2	2	10
	Comprehensive monitoring of ecosystem health (Adaptive Management)	3	3	3	3	3	15
WATER QUALITY							
	Conduct pilot program for watershed management for water quality improvement: FY 1998 Justification - Watershed management provides non-point pollutant source control over large areas. These pilot programs will be used to determine long-term watershed management program and its use to improving water quality for all users. FY 1998 Accomplishment - Would complete approximately 20 percent of high priority watershed management pilot program primarily on the undammed tributaries. This program will provide information to design future watershed management needs. Consequence of Less than Full Funding - Improvement in water quality would be delayed leading to further negative impacts on ecosystem, agriculture, and urban drinking water quality.	10	10	10	12	13	55
	Land conversion to help control water quality from drainage	5	5	5	10	10	35
	Pilot program for underground detention of drainage	1	1	1			3
	Real time water quality management	1	1	1	1	1	5
	Pollutant source control to reduce toxics discharge to the ecosystem: FY 1998 Justification - Many different sources of pollution need to be addressed to improve Delta water quality. Pollutant source controls form the foundation for the Water Quality Common Program. FY 1998 Accomplishment - Would complete approximately 10 percent of the high priority source control actions to reduce toxic discharges in the Bay-Delta system. Consequence of Less than Full Funding - Improvement in water quality would be delayed leading to further negative impacts on ecosystem, agriculture, and urban drinking water quality.	11	25	25	15	14	90

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	Construct wetlands wastewater treatment for portions of existing discharges to the Estuary:	12	13	10	5	5	45
	FY 1998 Justification - Many different sources of pollution need to be addressed to improve Delta water quality. Wetlands wastewater treatment provides a proven technology to reduce wastewater discharges to improve water quality.						
	FY 1998 Accomplishment - Would reduce pollutants from approximately 10 to 15 million gallons per day of discharges from wastewater treatment plants. Would be used to determine long-term use of wetlands treatment.						
	Consequence of Less than Full Funding - Improvement in water quality would be delayed leading to further negative impacts on ecosystem, agriculture, and urban drinking water quality.						
LEVEE SYSTEM VULNERABILITY							
	Delta levee improvements/habitat restoration and habitat protection	12	13	15	16	17	73
	FY 1998 Justification - Poor levee conditions increase risk of catastrophic levee failure and flooding of Delta islands.						
	FY 1998 Accomplishment - Makes approximately 3 to 6 miles of high priority levee repairs.						
	Consequence of Less than Full Funding - Lack of funding would result in continued high risk of levee failure with potential impacts to land use, infrastructure, ecosystem, and the Delta water supply.						

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WATER SUPPLY RELIABILITY							
	Technical planning and support to water districts for water use efficiency measures	1	1	1	1	1	5
	Financial assistance for water use efficiency measures and groundwater recharge: FY 1998 Justification - Making better use of available water requires improvements in use throughout CA. Improved water use efficiency and groundwater recharge provide relatively low cost contributions to improve overall water use and water quality. FY 1998 Accomplishment - Would provide incentives for continued implementation of existing BMPs and EWMPs. Consequence of Less than Full Funding - Water shortages will continue at current levels or will increase as future demands for environmental and other water use increases.	10	10	16	14	10	60
	Low interest loans/grants for water reclamation: FY 1998 Justification - Making better use of available water requires improvements in water development and use throughout California. Water reclamation allows wastewater to be reused to improve overall water use. FY 1998 Accomplishment - Would provide for facilities for reuse of 1000 to 3000 acre-feet per year depending on the intended use of the water. Consequence of Less than Full Funding - Water shortages will continue at current levels or will increase as future demands for environmental and other water use increases.	7	13	12	12	10	54
	Studies, designs, and environmental documentation for projects to increase water supply reliability and opportunities	3	6	10	16	12	47
Total		240	240	250	210	200	1140